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Creating a Template

This article was contributed by [Normand Roy](#)

Having the possibility of creating a template object, like a "CMap", with a CO₂ "anti-VARIANT" programmers will cheer this opportunity. Here follow step-by-

I will use an object with one simple method as an example. This object is fully

The interface will look like this:

```
interface IMinimumType : IUnknown
{
    HRESULT Min( TYPE a, TYPE b, TYPE *pMin );
}
```

The steps to create this object are: 1) Implementing the object template. 2) Defi

Implementing the object template.

```
template<class TYPE, class T, const CLSID *pclsid, WCHAR wszModName>
class CMinimumImpl : public CComObjectRootEx<CComMultiThreadMod
{
public:
    HRESULT __stdcall Min( TYPE a, TYPE b, TYPE *pMin )
    {
        *pMin = (a < b ? a : b);
        return S_OK;
    }
    BEGIN_COM_MAP(CMinimumImpl)
        COM_INTERFACE_ENTRY_IID( __uuidof(T), T )
    END_COM_MAP()

    static HRESULT WINAPI UpdateRegistry(BOOL bRegister)
    {
        OLECHAR wszCLSID[45];
        StringFromGUID2( *pclsid, wszCLSID, 45 );
        _ATL_REGMAP_ENTRY regMap[] = { { L"ObjName", ws

```

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```
return _Module.UpdateRegistryFromResource( IDR_
}
);
```

There is only one tricky part: the registration of the object in the registry. To ac instance of %ObjName% and %ObjCLSID% will be replaced with the content case. The interface supported is given as a template parameter. We will see now

Using preprocessor macros to define the interface in IDL.

Four information is needed in the template object to be able to create the interfri library associated with the interface.

We define the interface in IDL as:

```
#define CPP_QUOTE( name ) cpp_quote( #name )

#define MINIMUM_INTERFACE( RIID, TYPE, NAME )
{
    uuid( RIID ),
    pointer_default(unique)
}
interface I##NAME : IUnknown
{
    HRESULT Min( [in]TYPE a, [in]TY
);
    cpp_quote( "#ifdef __cplusplus"
    cpp_quote( "#ifndef MINIMUM_H"
    CPP_QUOTE( extern OLECHAR g_wsz
    CPP_QUOTE( EXTERN_C const CLSID
    CPP_QUOTE( typedef CMinimumImpl
    cpp_quote( " " )
    CPP_QUOTE( I##NAME )
    cpp_quote( " " )
    CPP_QUOTE( { CLSID_ ##NAME )
    cpp_quote( " " )
    CPP_QUOTE( g_wsz##NAME )
    CPP_QUOTE( > C##NAME; )
    cpp_quote( "#endif" )
    cpp_quote( " " )
    cpp_quote( "#endif" )
```

The first part is the declaration of the interface, the second part write a typedef must use multiple lines. You can see we are passing the TYPE, the Interface, it as I appended to the name.

We can declare the interface for int and double as follow:

<http://www.codeguru.com/atl/templateinterface.shtml>
CodeGuru - ATL/WTL Programming

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```
MINIMUM_INTERFACE( A91EBC05-87C0-11d2-9947-C26F54DDB3BE, int, M
MINIMUM_INTERFACE( A91EBC09-87C0-11d2-9947-C26F54DDB3BE, double
```

The interfaces generated will be: IMinimumDouble and IMinimumInt.

But it's not over, we must declare the name which will be written in the registry

Here are the macros:

```
#define BEGIN_NAME_MAP() cpp_quote( "#define NAME_MAP() \\" )
#define END_NAME_MAP() cpp_quote( " " )
#define NAME_ENTRY( NAME ) CPP_QUOTE( OLECHAR g_wsz##NAME[] = L#
```

The macro BEGIN_NAME_MAP define a macro in the generated header file.

```
BEGIN_NAME_MAP()
    NAME_ENTRY( MinimumInt )
    NAME_ENTRY( MinimumDouble )
END_NAME_MAP()
```

Now we will generate another macro in the generated header file to add all obj

```
#define BEGIN_OBJECT_MAP() cpp_quote( "#define OBJECT_MAP( " )
#define END_OBJECT_MAP() cpp_quote( " " )
#define OBJECT_ENTRY( NAME ) CPP_QUOTE( OBJECT_ENTRY( CLSID_
```

We use it in the IDL file like that:

```
BEGIN_OBJECT_MAP()
    OBJECT_ENTRY( MinimumInt )
    OBJECT_ENTRY( MinimumDouble )
END_OBJECT_MAP()
```

The last step is the library declaration:

```
#define BEGIN_LIBRARY()
{
    uuid(0968E542-87B7-11D2-9947-C2
    version(1.0),
    helpstr("codeguru 1.0 Type L
}
library CODEGURULib
{
    importlib("stdole32.tlb");
    importlib("stdole2.tlb");
}

#define END_LIBRARY() ;
#define LIBRARY_ENTRY( CLSID, NAME )
{
```

<http://www.codeguru.com/atl/templateinterface.shtml>
CodeGuru - ATL/WTL Programming

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```
uuid(CLSID)
}
class NAME
{
    (default) interface I##NAME;
};
```

It look like this for our two objects:

```
BEGIN_LIBRARY()
    LIBRARY_ENTRY( A91EBC0E-87C0-11d2-9947-C26F54DDB3BE, MI
    LIBRARY_ENTRY( A91EBC11-87C0-11d2-9947-C26F54DDB3BE, MI
END_LIBRARY()
```

Adding entry in the main object map.

In your main project file, you must add two lines:

```
NAME_MAP() //a macro we have generated

BEGIN_OBJECT_MAP(ObjectMap)
    OBJECT_MAP( ) another macro we have generated
END_OBJECT_MAP()
```

Conclusion.

The concept is kind is simple viewing by this angle. But be careful, as more ext much greater.

[Download source - 12KB](#)

Date Posted: December 1, 1998

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DATAMATION

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Subject: ATL Digest - 23 Feb 1998 (#1998-84)
From: LISTSERV@LISTSERV.MSN.COM
Date: Tue, 24 Feb 1998 06:04:10 +0100

Subject: ATL Digest - 23 Feb 1998 (#1998-84)
From: LISTSERV@LISTSERV.MSN.COM
To: ATL@LISTSERV.MSN.COM
Date: Tue, 24 Feb 1998 06:04:10 +0100

There are 4 messages totalling 489 lines in this issue.

Topics of the day:

1. "Library not registered" - dispinterface and C++ sink (2)
2. Getting images to VB
3. template

Date: Mon, 23 Feb 1998 18:57:14 -0800
From: Chuck Bell <[PRIVACY PROTECTION]>
Subject: Re: "Library not registered" - dispinterface and C++ sin

Is the error `DISP_E_MEMBERNOTFOUND`? If it is, your coclass is describing the dispinterface not your dual interface copy. In the `ITypeInfo` implementation they check to make sure the interface is a dual interface not a dispinterface. If it's a dispinterface they simply return `DISP_E_MEMBERNOTFOUND`.

Chuck

```
> -----Original Message-----
> From: Joe Parness [SMTP:PRIVACY PROTECTION]]
> Sent: Monday, February 23, 1998 6:45 PM
> To: ATL@LISTSERV.MSN.COM
> Subject: Re: "Library not registered" - dispinterface and C
```

```
> > -----Original Message-----
> > From: ATL - Active Template Library [mailto:ATL@LISTSERV.MSN.COM]
> > Sent: Monday, February 23, 1998 6:23 PM
> > To: ATL@LISTSERV.MSN.COM
> > Subject: Re: [ATL] "Library not registered" - dispinterface and
> >
> >
> > Hi Joe,
```

```
> IDispatchImpl requires the type library GUID because it's
> of
> IDispatch::Invoke simply defers to ITypeInfo::Invoke. The thi
> template
> parameter for IDispatchImpl is the GUID of your type library v
> ProxyEvents coclass is defined. Otherwise your sink looks fir
>
>
> Chuck
>
>
> -----Original Message-----
> From: Joe Farness [SMTP:[PRIVACY PROTECTION]]
> Sent: Monday, February 23, 1998 12:33 PM
> To: ATL@LISTSERV.MSN.COM
> Subject: Re: "Library not registered" - dispinterface :
> sink
>
>
> Hi Chuck,
>
> Here is what I have implemented for my client. AtlAdvise ret
> but
> the invoke fails with "Library not registered". It seems lik
> code
> should work just fine for dispinterface connection points. W
> doing
> wrong here... Also note that VB clients work OK with my serv
>
>
> class CProxyEvents :
> public
> IDispatchImpl<ItestEvents, IID_ItestEvents, CLSID_test>,
> public CComObjectRoot
>
> {
>
> public:
>
> CProxyEvents() {}
>
> BEGIN_COM_MAP(CProxyEvents)
> COM_INTERFACE_ENTRY(ItestEvents)
> COM_INTERFACE_ENTRY(IDispatch)
> COM_INTERFACE_ENTRY_IID(DIID_DItestEvents, I
> END_COM_MAP{}
>
> public:
>
> STDMETHODCALLTYPE Notify(VARIANT *v)
> {
> return 0;
> }
> };
> CComObject <CProxyEvents>*m_pProxyEvent=NULL;
>
>
>
>
> if (NULL == m_pItest)
> {
>
> if (S_OK == (hr = CoCreateInstance(CLSID_test,
> CLSCTX_LOCAL_SERVER,
> IID_Itest, (void**)&m_pItest)))
> {
>
> m_dwAdvise = 0;
> CComObject <CProxyEvents>*m_pProxyEv
> HRESULT result =
```

http://www.faqchest.com/msdn/ATL/atl-98/atl-9802/atl98022406_08419.html
ATL Digest - 23 Feb 1998 (#1998-84)

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http://www.faqchest.com/msdn/ATL/atl-98/atl-9802/atl98022406_08419.html
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```
> > CComObject<CProxyEvents>::CreateInstance{(CComObject<CProxyEvents>*)
> > ** }(&m_pProxyEvent);
> >                                     ASSERT(m_pItest);
> >                                     HRESULT hRes = AtlAdvise(m_pItest,
> > m_pProxyEvent->GetUnknown(),
> > DIID_DItestEvents, &m_dwAdvise);
> >                                     }
> >                                     }
> >
> -----
> search
>
> -----
>
> -----
```

Date: Mon, 23 Feb 1998 19:04:24 -0800
From: Sathish Babu <[PRIVACY PROTECTION]>
Subject: Re: "Library not registered" - dispinterface and C++ sink

No luck sir :-((
Did that also !!

Thanks
sathish

```

-----Original Message-----
From: Chuck Bell [SMTP:[PRIVACY PROTECTION]]
Sent: Monday, February 23, 1998 6:52 PM
To: ATLL@LISTSERV.MSN.COM
Subject: Re: "Library not registered" - dispinterf

C++ sink

```

GetUnknown does not AddRef your sink object. Thy using pMySink->QueryInterface instead.

Chuck

> -----Original Message-----
> From: Sathish Babu [SMTP:[PRIVACY PROTECTION]]
> Sent: Monday, February 23, 1998 6:21 PM
> To: ATL@LISTSERV.MSN.COM
> Subject: Re: "Library not registered" - dispinterf

```

> Subject:           Re: "Library not registered - dispenser
>
> I have same problem after implementing as told, My event
still not
> getting fired.
>
> But my problem is the COM Server is written in VB and C
is in ATL.

```

```
> Here is my VB Code
> Public Event OnDataAvail(ByVal DataLen As Long)
> Public Event OnClose(ByVal ErrNo As Long)
```

```
>
> Public Function OpenConnection() As Integer
> MsgBox "In Open Connection of VB COM Server", vbOKOnly,
COM Server"
> RaiseEvent OnDataAvail(100)
> End Function
>
> Public Function CloseConnection() As Integer
> MsgBox "In Close Connection of VB COM Server", vbOKOnly,
COM Server"
> RaiseEvent OnClose(10)
> End Function
>
> And the Snippet of my ATL Client is :
>
> class ATL_NO_VTABLE CMYSink :
> public CComObjectRootEx<CComSingleThreadModel>,
> public IDispatchImpl<IMYSink, &IID_IMYSink,
&LIBID_ATLCLIENTLib>
> {
> public:
> CMYSink()
> {
> }
>
> DECLARE_REGISTRY_RESOURCEID(IDR_MYSINK)
>
> BEGIN_COM_MAP(CMYSink)
> COM_INTERFACE_ENTRY(IMYSink)
> COM_INTERFACE_ENTRY(IDispatch)
> COM_INTERFACE_ENTRY_IID(DIID__EventGen, IDispatch)
> END_COM_MAP()
>
> // IMYSink
> public:
> STDMETHODCALLTYPE(OnClose) /*[in]*/ long ErrNo);
> STDMETHODCALLTYPE(OnDataAvail) /*[in]*/ long DataLen);
>
> STDMETHODCALLTYPE(QueryInterface)(REFIID, void**);
>
> };
>
> IDL Generated by VB
>
> dispinterface __EventGen {
> properties:
> methods:
> [id(0x00000001)]
> void OnDataAvail([in] long DataLen);
> [id(0x00000002)]
> void OnClose([in] long ErrNo);
>
> };
>
> What i changed is :
> {
> object,
> uuid(2800674E-AC9C-11D1-8DEA-006008C60395),
> dual,
> helpstring("IMYSink Interface"),
> pointer default(unique)
> }
```

http://www.faqchest.com/msdn/ATL/atl-98/atl-9802/atl98022406_08419.html

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http://www.faqchest.com/msdn/ATL/atl-98/atl-9802/atl98022406_08419.html

10/7/03

```

> }
> interface IMySink : IDispatch
> {
>     [id(1), helpstring("method OnDataIn")] :
> OnDataAvail([in] long DataLen);
>     [id(2), helpstring("method OnClose")] HF
> OnClose([in] long ErrNo);
> };
>
> The problem my events never got called. Any help
>
> the calling code is
>
> CoCreateInstance(CLSID_EventGen, NULL, CLSCTX_AI
> IID__EventGen, (void*)"pServer");
> _ASSERTE(pServer != NULL);
>
> CComObject<CMysink>* pMySink = NULL;
>
> CComObject<CMysink>::CreateInstance(&pMySink);
>
> DWORD dwAdvise = 0;
>
> hRes = AtlAdvise(pServer, pMySink->GetUnknown(),
> DIID__EventGen, &dwAdvise);
>
> short lRetVal;
> pServer->OpenConnection(&lRetVal);
> pServer->CloseConnection(&lRetVal);
>
> AtlUnadvise(pServer, DIID__EventGen, dwAdvise);
>
> pServer->Release();
>
> I never got the events fired.
>
> Any help is appreciated.
>
> Thanks
> sathish

```

Date: Mon, 23 Feb 1998 23:12:55 -0500
 From: Steve Lathrop <[PRIVACY PROTECTION]>
 Subject: Re: Getting images to VB

Scott,

I'd recommend using a SAFEARRAY of bytes inside a VARIANT. I'm using this technique to xfer images over DCOM between an ATL client and server (with dual interface). Once the array gets to your client, can just spit it out to a file using the standard Win32 File I/O.

See Don Box's OLE Q&A in the June 1996 MSJ for details on packaging things into SAFEARRAYS, etc.

If you want to "stream" the data over to the client, I'd consider

exposing an IEnumXXX interface on your server that gives you, say chunks of the image at a time. That way, you can allow your client to cancel the xfer at any time, instead of blocking during a potentially long method call.

Steve

Steve Lathrop, Consultant & Director
 Winning Solutions, Inc.
<http://www.winningsolutions.com>

```

> -----Original Message-----
> From: Scott Burgett [SMTP:[PRIVACY PROTECTION]]
> Sent: Monday, February 23, 1998 10:06 AM
> To: ATL@LISTSERV.MSN.COM
> Subject: Getting images to VB
>
>
> I'm trying to get a series of images to a VB client from a DCOM
> that I'm
> creating using ATL. What's the best way to package up the data?
> assuming
> that I have to implement IDataObject on the server side so that
> get to
> it. What I am not clear about is that if I use IDataObject to
> multiple
> images, do I need to use IStorage with IStreams?
>
>
> These images can be rather large, so from what I have seen on the
> listserv, I
> may want to write a custom IStream to package up the data. If
> that, then
> I know I will have to implement a method on the client side to
> to
> unpack that data as well.
>
> Any info and/or advice would be greatly appreciated.
>
> Thanks,
> Scott
>

```

Date: Mon, 23 Feb 1998 22:34:36 -0500
 From: Aleks Kleyn <[PRIVACY PROTECTION]>
 Subject: Re: template

Thank you, Charles for your help. The solution was little another, your advice helped to find it. I added default constructor, but problem went on. The names that link showed were very important. I tried a different combination. Using trial and error I discovered that not definition but functions themselves have to be present in the module where I use HdxChain<Int>. From my email is not seen directly that used 3 different files in project. How I understand from this template behaves like macro and itself does not create any object code. Now go ahead.

Aleks Kleyn.

```

-----Original Message-----
From: Charles Vaz <[PRIVACY PROTECTION]>

```

```

To: ATL@LISTSERV.MSN.COM <ATL@LISTSERV.MSN.COM>
Date: Sunday, February 22, 1998 12:44 AM
Subject: Re: template
=20
=20
Hi,
First of all ' class Int ' needs a default constructor because
the
declaration ' HdxObject<T>::HdxObject(T TNew) '
Hence, a simple solution is to give default values for the
parameters to
the ' Int ' constructor .
Hence, the following changes in chain.h
=20
class Int {
.....
Int(int da =3D0 ,int db=3D0);
.....
};
=20
This should compile and link fine under MSDEV 5.0
=20
Regards,
=
---
Charles Vaz.
Software Design Engineer,
Tektronix Engineering Development (India) Pvt. Ltd.
Tek Towers, Hayes Road, Bangalore-560 025.
Phone:(080)2275577 Extn:3222
=
---
-----Original Message-----
From: Aleks Kleyn <[PRIVACY PROTECTION]>
To: ATL@LISTSERV.MSN.COM <ATL@LISTSERV.MSN.COM>
Date: Sunday, February 22, 1998 4:23 PM
Subject: template
=20
=20
Before using ATL I tried to use just template in plain C++. But
gives
me errors
=20
TempMain.obj : error LNK2001: unresolved external symbol "publ
class
HdxObject<class Int> __thiscall HdxChain<class Int>::AddNew(c
Int)"
{?AddNew@?HdxChain@Int@@@QAE?AV?SHdxObject@VInt@@@VInt@@@
TempMain.obj : error LNK2001: unresolved external symbol "publ
__thiscall
HdxChain<class Int>::HdxChain<class Int>(void)"
{??0?SHdxChain@VInt@@@QAE?XZ}
=20
=20
Below my simple code

```

```

=20
=20
#include "Chain.h"
=20
Int::Int
{
int da,
int db
}
{
a=3Dda;
b=3Ddb;
}
=20
template<class T>
HdxObject<T>::HdxObject(T TNew)
{
TObj=3DTNew;
}
=20
template<class T>
HdxChain<T>::HdxChain()
{
First=3DNULL;
}
=20
template<class T>
HdxObject<T> HdxChain<T>::AddNew(T TNew)
{
HdxObject<T> * NewObject;
=20
NewObject=3Dnew HdxObject<T>(TNew);
NewObject->Next=3DFirst;
First=3DNewObject;
return *NewObject;
}
=20
template<class T>
class HdxObject
{
public:
HdxObject(T TNew);
HdxObject * Next;
T TObj;
};
=20
template<class T>
class HdxChain
{
public:
HdxChain();
HdxObject<T> AddNew(T TNew);
private:
HdxObject<T> * First;
};
=20
class Int
{
public:

```

```
Int(int da,int db);
int a;
int b;
};

=20
#include "Chain.h"

=20
void main()
{
    HdxChain<int> a1;
    int a1(5,6);
    a1.AddNew(a1);
    int a2(2,5);
    a1.AddNew(a2);
}

=20
What link does not like and how to prove code.
Thank you, Aleks Kleyn.

=20
-----
Users Guide =
http://www.microsoft.com/sitebuilder/resource/mailfaq.asp
search
=20
```

End of ATL Digest - 23 Feb 1998 (#1998-84)

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COM/ATL Issues

Last Modification: December 12, 2001

Q: HOWTO: Reuse interface implementation in source in ATL projects - part II: base and derived interfaces

A: A common phenomenon during the evolution of a component is the development of newer extended version of one or more interfaces usually by deriving from the old interfaces:

```
interface ISomething : IUnknown
interface ISomething2 : ISomething
interface ISomething3 : ISomething2
```

Another possible case is designing the component to have it implement a series of cascaded interfaces - interfaces that derive in a chain:

```
interface IBase : IUnknown
interface IDerived : IBase
interface IMoreDerived : IDerived
interface IAnotherDerived : IBase
interface IAnotherMoreDerived : IAnotherDerived
```

In both cases it is desirable to share the implementation of the base interfaces throughout the project. This is accomplished through the use of C++ templates. Let's consider the following simple derivation chain:

```
interface IBase : IUnknown
interface IDerived : IBase
```

The C++ templates we'll use look as following:

```
template <typename Itf>
class IBaseImpl : public Itf
{
    // Implement the IBase methods here
};

template <typename Itf>
class IDerivedImpl : public Itf
{
    // Implement the IDerived methods here
};
```

And a class that's using these implementations would look like the following:

```
class ATL_NO_VTABLE CAt1Obj :
public CComObjectRootEx<CComMultiThreadModel>,
public CComCoClass<CAt1Obj, &CLSID_At1Obj>,
public IDerivedImpl< IBaseImpl<IDerived> >
```

<http://www.mvps.org/vcfaq/com/8.htm> 10/7/03
HOWTO: Reuse interface implementation in source in ATL projects - part II: base and de... Page 3 of 3

```
class ATL_NO_VTABLE CAt1Obj :
public CComObjectRootEx<CComMultiThreadModel>,
public CComCoClass<CAt1Obj, &CLSID_At1Obj>,
public IDerivedImpl< CAt1Obj, IBaseImpl<IDerived> >
{
    ...
};
```

References and samples:

- COM FAQ 7: HOWTO: Reuse interface implementation in source in ATL projects - part I: standalone interfaces

```
{
public:
    CAt1Obj() {}

    DECLARE_REGISTRY_RESOURCEID(IDR_AT1OBJ)

    DECLARE_NOT_AGGREGATABLE(CAt1Obj)

    BEGIN_COM_MAP(CAt1Obj)
        COM_INTERFACE_ENTRY(IBase)
        COM_INTERFACE_ENTRY(IDerived)
    END_COM_MAP()
};
```

Note IDerivedImpl<> does not derive from IBaseImpl<>, but instead it is passed in as a template parameter. This allows you to have multiple implementations of IBase and use them wherever appropriate. However, if this is not essential for your design, but you do have a deep interface inheritance hierarchy, it might be beneficial to simplify the ATL object class' derivation by explicitly deriving from the implementation of the base interface in the implementation of the derived interface:

```
template <typename Itf>
class IBaseImpl : public Itf
{
    // Implement the IBase methods here
};

template <typename Itf>
class IDerivedImpl : public IBaseImpl<Itf>
{
    // Implement the IDerived methods here
};

class ATL_NO_VTABLE CAt1Obj :
public CComObjectRootEx<CComMultiThreadModel>,
public CComCoClass<CAt1Obj, &CLSID_At1Obj>,
public IDerivedImpl<IDerived>
{
public:
    CAt1Obj() {}

    DECLARE_REGISTRY_RESOURCEID(IDR_AT1OBJ)

    DECLARE_NOT_AGGREGATABLE(CAt1Obj)

    BEGIN_COM_MAP(CAt1Obj)
        COM_INTERFACE_ENTRY(IBase)
        COM_INTERFACE_ENTRY(IDerived)
    END_COM_MAP()
};
```

Please read the first part of this article for techniques on how to deal with code bloat and dual interfaces. Note you can mix the techniques from this and the first part:

```
template <typename T, typename Itf>
class IDerivedImpl : public Itf
{
    // Implement the IDerived methods here
    // In a method that requires services from the derived class
    {
        T* pT = static_cast<T*>(this);
        pT->SomeMethod();
        ...
    }
};
```

<http://www.mvps.org/vcfaq/com/8.htm>

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TOP 20 WEB RESULTS out of about 1,050

1. [April 1999/Adapting Automation Arrays to the Standard vector ...](#)
... Considering the above, the task of bridging one interface to another is anything but trivial. ... its (non-type) template parameter is a VARENUM enumerated value.
...
[www.moderncppdesign.com/publications/adapting_automation_arrays.html](#) [cached](#)
2. [priority_queue](#)
... Top of document ©Copyright 1999 Rogue Wave Software ... interface. ... default template parameters, you must always provide a Container template parameter, a Compare ...
[www.roguewave.com/support/docs/hppdocs/stdref/priority-queue.html](#) [cached](#) | [more results from this site](#)
3. [unique_view Type](#)
... The properties of any unique_view instance depend on the properties of the container template parameter. The interface of unique_view adapts itself [1] to the ...
[www.zib.de/weiser/Ati/unique_view.html](#) [cached](#) | [more results from this site](#)
4. [Wicked Code, MSJ November 1999](#)
... name passed to it as a template parameter and modifying ... it with the object's own IUnknown interface pointer. ... instance naming, see the February 1999 Wicked Code ...
[www.microsoft.com/msj/1199/wicked/wicked1199.aspx](#) [cached](#) | [more results from this site](#)
5. [Namespaces and the Interface Principle](#)
... appeared in C++ Report, 11(3), March 1999. ... it does because of the Interface Principle ... error C2784: 'class std::reverse_iterator<'template-parameter-1', 'template ...
[www.gotw.ca/publications/mill08.htm](#) [cached](#) | [more results from this site](#)
6. [ATL Creators](#)
... The template parameter of CComCreator<> specifies two things: whether ... your own class factory interface is used ... Copyright © 1999 - Visual C++ Developers Journal.
[www.devx.com/free/mgznarch/vcdj/1999/octmag99/atladvantage1.asp](#) [cached](#)
7. [IDevResource.com COM channel - Active Template Library: ...](#)
... This provided licensing through the IClassFactory2 interface. ... it returns error specified as its template parameter. ... com, November 15, 1999; What COM is All ...
[www.idvresource.com/com/library/articles/atlinternals.asp](#) [cached](#)
8. [I ...](#)
... from a very small pure virtual class (an 'interface', in Java terms ... Date: Sun, 28 Nov 1999 13:31 ... since then the template can have a template parameter that will ...

<http://search.yahoo.com/search?p=interface+and+%22template+parameter%22+and+1999&e...> 10/7/03
Yahoo! Search Results for interface and "template parameter" and 1999 Page 3 of 3

18. [co005](#)
... a template+parameter cum grid representation (Nespor and Vogel 1986, Nespor 1993, Sallarelli 1999) as the theoretical model for the interface between meter and ...
[www.uni-duisburg.de/FB3/SILF/SILFI2000/abstracts/papers/Sallarelli_co005.html](#) [cached](#)
19. [Thread Communication Mechanisms in Parallel Algorithms by Lalit ...](#)
... with a pointer to an instance of the first // template parameter template <class ... m_work(r); e.free(); } } Using Six // condition variable interface class Cv ...
[www.ddj.com/ftp/1999/1999_04/parallel.txt](#) [cached](#)
20. [Supporting Threads in Standard C++ - 1](#)
... but they differ in capabilities and native interface. ... 8. August 1999, "Win32 Multithreading Made Easy" by John ... to T and T is a template parameter. ...
[www.acqu.org/c++sig/public/threads/Threads_in_Standard_C++_1.htm](#) [cached](#)

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[www.kegel.com/dkftpbench/cancheckDemo.html](#) [cached](#)

9. [Geocrawler.com - help-g++ - 2.6.0 does templates better than 2.6 ...](#)
... TREE_TYPE (parm))) { sorry ("aggregate template parameter types");
TREE_TYPE ... if (interface_unknown (! iflag_external_templates) p->interface =
1; /* unknown ...
[www.geocrawler.com/archives/3/362/1994/12/0/2043672/](#) [cached](#)
10. [Code Generator for HPF Library on Fujitsu VPP5000 \(PDF\)](#)
... an at-sign, in order for Interface User HPF ... J.35, 2,(December 1999) M. van ...
Template parameter @type_xxx@ @kind_xxx@ @rank_xxx@ @lbound_n_xxx@
@ubound_n_xxx@ ...
[magazine.fujitsu.com/us/vol35-2/paper17.pdf](#) [view as html](#)
11. [C++ I/O library \(experimental\)](#)
... This interface is used only for named locales that the OS knows about ...
Changed bits to remove the extension of a second template parameter. ...
December 28, 1999, ...
[www.sgi.com/tech/stl/standard_library.html](#) [cached](#)
12. [priority_queue](#)
... interface. ... a Container template parameter and a Compare template
parameter when declaring ... Top of document Contents Index Next file ©Copyright
1999, Rogue Wave ...
[hills.ccsf.cc.ca.us/libstd_v2/stdref/pri_2327.htm](#) [cached](#) | [more results from this site](#)
13. [CS 340 A S D M F E - S 1999 \(PDF\)](#)
... F I N A L E X A M I N A T I O N - S P R I N G 1999 Time Limit ... Sketch briefly the interface
(s), ie, the .h file(s) ... a member function for a class, the template parameter(s)
must ...
[www.cs.virginia.edu/~cs340/materials/previous_exams/final.99.pdf](#) [view as html](#)
14. [Smart Pointers](#)
... These smart pointer class templates have a template parameter, T, which ...
implementation from translation units which merely use the interface. ... November
1999. ...
[www.boost.org/libs/smart_ptr/smart_ptr.htm](#) [cached](#) | [more results from this site](#)
15. [Yahoo! Groups : boost Messages : Message 1091 of 27136](#)
... Date: Thu Dec 2, 1999 12:54 ... I "think" that this implementation template
parameter differs > > significantly ... implementing a smart pointer (interface defined
by ...
[groups.yahoo.com/group/boost/message/1091](#) [cached](#) | [more results from this site](#)
16. [The New 'paramfile' Parameter Type](#)
... have the possibility of defining a template parameter as being of ... to PAF file
syntax (see "Data Interface Control Document ... For instance: 1999-10-
21T20:17:45.000 ...
[www.eso.org/~amchavan/projects/docs/archive/paramfiles.html](#) [cached](#) | [more results from this site](#)
17. [Exploring Template Template Parameters](#)
... we use a second template template parameter, which has ... Knowing only this
interface, a user could create ... and the STL, Addison-Wesley Publishing Company,
1999. ...
[www.progdoc.de/papers/tp/psi-tp/psi-tp.html](#) [cached](#) | [more results from this site](#)

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1. **(C++) more patches**
... The template-parameter is bound directly to the template ... 17 12:51:10 1.35 — semantics.c 1998/11/19 ... TYPE_BEING_DEFINED (0) = 1; / Reset the interface data, at ...
gcc.gnu.org/ml/gcc-patches/1998-11/msg00286.html [cached](#) | [more results from this site](#)
2. **Namespaces and the Interface Principle**
... one year ago, in the March 1998 issue, [1] ... it does because of the Interface Principle ... error C2784: 'class std::reverse_iterator< template-parameter-1', ...
www.gotw.ca/publications/mill08.htm [cached](#) | [more results from this site](#)
3. **UNIX man pages : stack (3)**
... INTERFACE ... aaaaaa Rogue Wave Software Last change: 02 Apr 1998 5 - stack(C++ ... If your compiler does not support template parameter defaults, you are required to ...
mirrors.ccs.neu.edu/cgi-bin/unixhelp/man-cgi?stack+3 [cached](#)
4. **Internationalize dynamic messages**
... string you entered will replace the template parameter (0) and ... between an awkward or an easy-to-use interface. ... a gzipped tar file /javaworld/jw-02-1998/howto/jw ...
www.javaworld.com/javaworld/jw-02-1998/jw-02-howto.html [cached](#)
5. **basic_ostringstream**
... Interface ... The type traits_type is a synonym for the template parameter traits ... file Top of document Contents Index Next file ©Copyright 1998, Rogue Wave ...
www.litho.ualgary.ca/opt/SPRO/tools7lib/stdlibcr/bas_8767.htm [cached](#) | [more results from this site](#)
6. **>Blitz-dev Archive - BZDEV: zip() interface**
... Date: Tue, 27 Oct 1998 09:24:21 -0600 ... with a little rework of the zip() interface, it is ... call and explicitly indicate the type via a template parameter, as in ...
oonumerics.org/MailArchives/blitz-dev/msg00193.php [cached](#) | [more results from this site](#)
7. **basic_ostringstream**
... Interface ... type traits_type is a synonym for the template parameter traits ... ISO/IEC 14882:1998 - International Standard for Information Systems - Programming ...
www.roguewave.com/support/docs/sourcepro/stdlib/basic-ostringstream.html [cached](#) | [more results from this site](#)
8. **In-depth: The Parser**
... member function parse(...) compatible with the conceptual Interface: ... always, dependent on the template parameter ScannerT ... Copyright © 1998-2003 Joel de

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17. **Exploring Template Template Parameters**
... we use a second template template parameter, which has the ... Knowing only this interface, a user could create ... Programming languages - C++, ISO/IEC 14882, 1998. ...
www.progdoc.de/papers/ttp/psi-ttp/psi-ttp.html [cached](#) | [more results from this site](#)
18. **- allocator(3C++) Standard C++ Library Copyright 1998, Rogue Wave**
... 3C++ Standard C++ Library Copyright 1998, Rogue Wave ... Each container has an allocator template parameter specifying ... so it must have an appropriate interface. ...
www.math.iast.edu/computing/docs/solaris3/man/cat3c++/allocator.3 [cached](#) | [more results from this site](#)
19. **ECG IST-2000-26473 Effective Computational Geometry for Curves**
(PDF)
... under the "Information Society Technologies" Programme (1998-2002) ... ; We mentioned that the second template parameter of the ... ; 3 User interface The user ...
www.sop.inria.fr/prisme/personnel/karavels/awwd2/ecg-implementation.pdf [view as html](#)
20. **ECG IST-2000-26473 Effective Computational Geometry for Curves and**
(POSTSCRIPT)
... Programme (1998-2002) ... We mentioned that the second template parameter of the Additively weighted Voronoi ... 3 User interface The user interface is very similar to ...
www.cse.nd.edu/~mkaravel/papers/ECG-TR-121201-01.ps [view as html](#)

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9. **allocator**
... Interface template types the raw storage based on the template parameter. ... Alternate Interface. ... document Contents Index Next file Copyright (c) 1998, Rogue Wave ...
www.scl.kyoto-u.ac.jp/scvppil/appli_manual/SUNWsp/WS6U2/ja/manuals/stdlib/stdref/all_7029.htm [cached](#) | [more results from this site](#)
 10. **CodeGuru - ATL/WTL Programming**
... The interface supported is given as a template parameter. ... uid(CLSID) \{ \code NAME \{ \{ default \} interface I#NAME; \}; ... Date Posted: December 1, 1998. ...
www.codeguru.com/atl/templateinterface.shtml [cached](#)
 11. **Geocrawler.com - help-g++ - 2.6.0 does templates better than 2.6**
... TREE_TYPE (parm)) { sorry ("aggregate template parameter types"); TREE_TYPE ... if (interface_unknown || iflag_external_templates) p->interface = 1; / unknown ...
www.geocrawler.com/archives/3/362/1994/12/0/2043672/ [cached](#)
 12. **repo.pl - repository object interface**
repo.pl - repository object interface ... The optional \$template parameter should be a ref to a hash ... was imported (DD-Mon-YYYY, eg '8-Jan-1998') submitted by [char ...
www.wirm.org/wrm-pod/repo.html [cached](#)
 13. **Larch/C++ Reference Manual - Requirements on Template Parameters**
... describe the requirements on the template parameter for a ... Id: SimpleSetRequirement.lsl, v 1.1 1998/08/29 21 ... SimpleSetTrait used in the interface specification of ...
www.cs.iastate.edu/~leavens/larchc++manual/cpp_155.html [cached](#)
 14. **// Dereferencer.h // This file contains the BTL_InD and**
... Copyright (C) 1997, 1998 Birkbeck College ... together with BTL_InD provide a // uniform interface for the ... to be used must be // provided as the template parameter. ...
people.cryst.bbk.ac.uk/~classlib/BTL3/btl/Dereferencer.h [cached](#)
 15. **AnyDBM**
... Copyright © WebThing Ltd, 1998: all rights reserved ... AnyDBM is a completely unified interface to the ... The underlying implementor is merely a Template parameter. ...
www.webthing.com/software/AnyDBM/ [cached](#)
 16. **ATL Digest - 23 Feb 1998 (#1998-84)**
... to make sure the interface is a dual interface, not a ... The third > template > > parameter for IDispatchImpl is the GUID of ... Sent: Monday, February 23, 1998 12:33 ...
www.faqchost.com/msdn/ATL/atl-98/atl-9802/atl98022406_08419.html [more results from this site](#)

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1. [Tammi Site - Welcome!](#) ... An abstract Builder class implementing the Task interface builds the page ... template and builder for a client request is based on a **template parameter** included in ... [tammi.sourceforge.net/](#) [cached](#)
2. [Tea, TeaServlet, Trove: Interface TemplateLoader.Template](#) ... Enclosing class: TemplateLoader public static interface TemplateLoader.Template ... If any **template parameter** names is unknown, the array entry is null. ... [teatrove.sourceforge.net/javadoc/com/teatrove/runtime/TemplateLoader.Template.html](#) [cached](#)
3. [HOWTO: Reuse interface implementation in source in ATL projects -](#) ... only using the derived class as a **template parameter** was shown, you can put whatever template parameters are needed for customizing the interface implementation ... [www.mvps.org/vcfajcom/7.htm](#) [cached](#) | [more results from this site](#)
4. [allocator](#) ... implementation. The interface **template types** the raw memory provided by the implementation based on the **template parameter**. Only ... [www.asd.web.cern.ch/wwwasd/lhc++/RW/stdlibcr/all_7029.htm](#) [cached](#) | [more results from this site](#)
5. [Carlo Wood - Re: what's next](#) ... -benjamin About the **allocator template parameter**, that is my original design. I just thought you'd like the C interface more easily heheh ... [gcc.gnu.org/ml/libstdc++/2002-12/msg00056.html](#) [cached](#) | [more results from this site](#)
6. [Octopuli/C++: Compile Time Indirection](#) ...). This works because interface has access to impl and can use it as a **template parameter** and because state1<> has access to its **template parameter**. ... [www.octopuli.demon.co.uk/C++/CompileTimeIndirection.html](#) [cached](#)
7. [unique_view Type](#) ... The properties of any **unique_view** instance depend on the properties of the container **template parameter**. The interface of **unique_view** adapts itself [1] to the ... [www.zib.de/weiser/Art/unique_view.html](#) [cached](#) | [more results from this site](#)
8. [pool_alloc - Boost Pool Standard Allocators](#) ... The typedef **user_allocator** publishes the value of the **UserAllocator template parameter**. ... by the **allocator** is accessible through the **Singleton Pool Interface**. ... [www.boost.org/libs/pool/doc/interfaces/pool_alloc.html](#) [cached](#) | [more results from](#)


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18. [allocator](#) ... The interface **template types** the raw storage based on the **template parameter**. Only the implementation object is passed into a container. ... [www.litho.ucalgary.ca/opt/SPROtools7/lib/stdlibcr/all_7029.htm](#) [cached](#) | [more results from this site](#)
19. [Programming with Interfaces in Java](#) ... Notice that C++ templates are a form of **implicit_interface**. When you define a class template in C++ and then use the **template parameter** in the body of the ... [csis.pace.edu/~bergin/papers/Interface.html](#) [cached](#) | [more results from this site](#)
20. [boost:python returning new PyObject references](#) ... (for interface or something? ... About base_object.hpp: > You use **python_type** as the name of a **template parameter** > **template<class python_type>** > **strud** ... [mail.python.org/pipermail/c++-sig/2001-December/000675.html](#) [cached](#) | [more results from this site](#)

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9. [Using a Template to Define an Interface A Template Stack ... \(PDF\)](#) ... the Complete Stack Implementation We can define the stack **template parameter** to be ... that is given as the type parameter to the Stack interface must implement a ... [www.cs.utexas.edu/users/lavender/courses/ee360c/lectures/lecture-11.pdf](#) [view as html](#) | [more results from this site](#)
10. [Namespaces and the Interface Principle](#) ... to operate the way it does because of the Interface Principle ... error C2784: 'class std::reverse_iterator< **template-parameter-1**, **template-parameter-2**, **template** ... [www.gotw.ca/publications/mill08.htm](#) [cached](#) | [more results from this site](#)
11. [d8forums - Default type-value for template parameter type](#) ... d8forums Archive for: comp.lang.c++ Default type-value for **template parameter** type Click here to see this thread with ... This is an object cache interface used to ... [d8forums.com/arch/88/2003/9/905659](#) [cached](#)
12. [Using Dreamweaver Template Expressions at InformIT.com](#) ... earlier, **template parameters** are either entered by hand or by using Dreamweaver's editable attribute user interface. If the **template parameter** is entered ... [www.informit.com/isapi/product_id=%7BEE21DAB0-2302-4DE3-8990-23B64C00310%7D/content/index.asp](#) [cached](#) | [more results from this site](#)
13. [Boost Mailing List Archive -- Re: \[boost\] Named Template ...](#) ... Wouldn't it allow some > decoupling of **template parameter** processing (the 'class > metaimplementation') from the class interface, similar to the > pimpl idiom? ... [lists.boost.org/MailArchives/boost/msg33145.php](#) [cached](#) | [more results from this site](#)
14. [15.3 Building Your Own Allocators](#) ... In this interface, the class **allocator_interface** provides all types and typed ... as raw bytes using the class provide by the **Allocator template parameter**. ... [www.ccd.bnl.gov/bc/cluser/pgi/pgC++_lib/stdlibug/bui_2068.htm](#) [cached](#) | [more results from this site](#)
15. [AXP OpenVMS Cluster Help CXXLSTD allocator](#) ... Each container has an **allocator template parameter** specifying the type of **allocator** to be ... **allocator**, but if you do so it must provide an appropriate interface. ... [www.vms.gsi.de/HELP/CXXLSTD/ALLOCATOR](#) [cached](#) | [more results from this site](#)
16. [IPC::XPA - Interface to the XPA messaging system](#) ... NAME. IPC::XPA - Interface to the XPA messaging system. SYNOPSIS. ... Retrieve data from the servers specified by the **Stemplate parameter**. ... [hea-www.harvard.edu/MST/simul/software/docs/html/IPC::XPA.html](#) [cached](#) | [more results from this site](#)
17. [>Blitz-dev Archive -- BZDEV: zip\(\) interface](#) ... of the **zip()** interface, it is possible to omit the trailing parameter in the function call and explicitly indicate the type via a **template parameter**, as in: A ... [oonumerics.org/MailArchives/blitz-dev/msg00193.php](#) [cached](#) | [more results from this site](#)

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TOP 19 WEB RESULTS out of about 19

1. **Neohapsis Archives - Microsoft DCOM Discuss - Re: Interface ...**
From: Sievert, James A (James.Sievert_at_UNISYS.COM) Date: Wed Oct 02 2002 - 08:41:35 CDT. ... In DCOM, reserve interface inheritance for interface expansion ...
archives.neohapsis.com/archives/microsoft/various/dcom/2002-q4/0003.html [cached](#) | [more results from this site](#)
2. **http://www.faqchest.com/msdn/DCOM/dcom-02/dcom-0210/dcom-021000/**
www.faqchest.com/msdn/DCOM/dcom-02/dcom-0210/dcom-021000/ [more results from this site](#)
3. **Managed Object Behavior Inheritance and Scattering Support in ...**
(PDF)
... solicited on any of its interfaces, namely the management interface or the ... actions, notifications, name-bindings, parameters) and the inheritance of behaviors ...
sistemac.carnet.hr/~ddelija/ite/papers/sid9511.pdf [view as html](#)
4. **Managed Object Behavior Inheritance and ScatteringSupport in TIMS**
(POSTSCRIPT)
... any of its interfaces, namely the management interface or the ... Axel), Herpers (Martine), Holden (David) et Sievert (Stephan ... 91) Rumbaugh (James), Blaha (Michael) ...
www.simpleweb.org/bibliography/articles/general/sid9511.ps [view as html](#)
5. **Diversity in 2002 (PDF)**
... 14 M 5/18/02 Sievert, S. 1 ... presented Dimondale Elementary School Principal James Cooper (center ... the science of fire, urban-wildland interface issues, politics ...
www.michigan.gov/documents/july02_PG_33675_7.pdf [view as html](#)
6. **Contents**
... dimensionless, item, litre, newton, sievert, ... render them in HTML in a graphical user interface. ... Daniel Lucio, Pedro Mendes, Eric Mjolsness, James Schaff, Bruce ...
www.cds.caltech.edu/erato/sbml/docs/sbml-level-1/html/sbml-level-1.html [cached](#) | [more results from this site](#)
7. **Systems Biology Markup Language (SBML) Level 1: Structures and ...**
(PDF)
... This inheritance hierarchy is depicted in Figure 1. SBase Compartment Unit Model Reaction Specie KineticLaw Parameter Rule SpecieConcentrationRule ...
xml.coverpages.org/sbmlLevel-1.pdf [view as html](#)
8. **Systems Biology Markup Language (SBML) Level 1: Structures and ...**
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http://search.yahoo.com/search?p=%28James+A+Sievert%29+and+interface+inheritance&ei... 10/7/03
Yahoo! Search Results for (James A Sievert) and interface inheritance Page 3 of 3

17. **4-BIBLIOGRAPHY**
... Gordon DF, Lewis SR, Haugen BR, James RA, et al ... Hennessey JV, Jackson IMD: The interface between thyroid hormones ... Surks MI, Sievert R: Drugs and thyroid function ...
www.thyroidmanager.org/Chapter4/4-biblio.htm [cached](#)
18. **Science Fiction, Fantasy & Horror - Vintage 1940's - 1990's Mass ...**
(MICROSOFT WORD)
... ADLARD, MARK - Interface; **** Multiface; **** Volteface; ... BLUMGARTEN, JAMES - The Astronaut; ... BROOKES, OWEN - The Gatherer; **** Inheritance; **** The Window of ...
www.dougcomicworld.com/INVENTORY-ScienceFictionHorrorPaperbacks.doc [view as html](#)
19. **Faculty of Medicine (RTF)**
... P. Shedden*, B. and Rodgers*, R. 'Clinical Information System User Interface Design', Informatics ... Meeting, in D. McIntyre, D. Cameron & D. James (ed), Annual ...
www.monash.edu.au/resgrant/publications/rsopa/1995/med/med96.rtf [view as html](#)

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www.sbw-sbml.org/workshops/sbth/sbml-level-1.pdf [view as html](#) | [more results from this site](#)

9. **Unified Medical Language System (UMLS) (CBM 96-8)**
... David A. Evans, Ph.D. Columbia University, James J. Cimino ... In the future, the UMLS may serve as an interface between medical ... O'Keefe KM, Sievert M, Mitchell JA ...
www.nlm.nih.gov/pubs/cbm/umlscbm.html [cached](#)
10. **Using Software Engineering Metrics In AP Modularization A thesis ...**
(PDF)
... to design complexities capturing features such as complexity of inheritance hierarchies [17,24], coupling and cohesion [2,17], and interface complexity [5,15]. ...
etd-submit.etsu.edu/etd/theses/available/etd-0718101-161818/unrestricted/owusu-tiekuk0813a.pdf [view as html](#)
11. **.NET and COM: Working Together (PDF)**
... was just running into the unique personality of Beta 1. James Sievert also helped ... like this allows code from other languages to find the interface methods and ...
www.softinsight.com/DotNetandCOM.pdf [view as html](#)
12. **Systems Biology Markup Language (SBML) Level 2: Structures and ...**
(PDF)
... Open arrows indicate inheritance, pointing from inheritors to ... component, then the user interface should display ... dimensionless item litre newton sievert Table 2 ...
www.biopax.org/Docs/EXT_sbml-level-2.pdf [view as html](#)
13. **Abstract EURODAC'94**
... Both, B. Biermann, R. Lerch, Y. Manol, K. Sievert ... Software Partitioning and Minimizing Memory Interface Traffic. ... Michael J. Alexander, James P. Cohoon, Joseph L ...
ballade.cs.ucla.edu/~kohcc/sigdacdrom/comp1994/euro94/abstract.htm [cached](#)
14. **Binoj's C++ links page binoj@unbounded.com Search: c++ tutorial ...**
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15. **Systems Biology Markup Language (SBML) Level 1: (POSTSCRIPT)**
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... liter mole siemens weber dimensionless item litre newton sievert. ... them in HTML in a graphical user interface. ... Mark Poolman, Wayne Rindone, James Schaff, Maria ...
www.sbml.org/specifications/sbml-level-1/version-2/sbml-level-1-v2.ps [view as html](#) | [more results from this site](#)
16. **IGRT Book/PM 6 w/pix (PDF)**
... It is the study of this interface in plant systems that forms the theme of the Graduate Research Training program at ASU. ... James Allen and Neal Woodbury. ...
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Re: [Sievert, James A] <James.Sievert@UNISYS.com>] XML Schema question for you...
lists.w3.org/Archives/Public/www.xml-schema-comments/2000JulSep/0040.html [cached](#) | [more results from this site](#)
2. [Neohapsis Archives - Microsoft DCOM Discuss - Re: Hi Keith! DCOM ...](#) 
... > Sam Gentile > System Architect > OTG > > > -Original Message- From: Sievert, James A [mailto:James.Sievert@UNISYS.COM] : Sent: Thursday, March 08 ...
archives.neohapsis.com/archives/microsoft/various/dcom/2001-q1/1203.html [cached](#) | [more results from this site](#)
3. [\[XmlRpc-Java\] I'd like to see a slight change to XmlRpcServer ...](#) 
[XmlRpc-Java] I'd like to see a slight change to XmlRpcServer... Sievert, James A James.Sievert@UNISYS.com Tue, 29 Aug 2000 14:51:53 -0500: ...
xmlrpc.helma.org/archives/xmlrpc/2000-August/000171.html [cached](#) | [more results from this site](#)
4. [XMLPL Candidate Recommendation Issues List](#) 
... Description: James Sievert of Unisys has identified the following issue: --- I understand this point up to the point at which I see an example like the following ...
www.w3.org/2000/xp/Group/xmlrpc-cr-issues.html [cached](#)
5. [Matthew Reynolds's .NET 247 : System.Runtime.Remoting ...](#) 
... From: "Sievert, James A" James.Sievert@UNISYS.COM Reply To: dotnet discussion DOTNET@DISCUSS.DEVELOP.COM To: DOTNET@DISCUSS.DEVELOP.COM Subject: Re ...
www.dotnet247.com/247reference/System/Runtime/Remoting/ObjectHandle.aspx?v=2 [cached](#) | [more results from this site](#)
6. [COTS Digital Signatures Workgroup Education Day Agenda](#) 
... of General Services, mmaupin@dgs.state.va.us, (804) 786-3261, (804) 371-8305. Mavredes, James, Dept. ... Sievert, Bob, Dept. ... Fehn, Sally, Unisys, Horkey, Michael, Unisys, ...
www.cots.state.va.us/dsi/eduday.htm [cached](#)
7. [Fredonia Alumni E-Mail Page \(By Class Year\)](#) 
... musingman@aol.com) or (David.Ullmer@unisys.com) Linda ...
Satone@worldnet.att.net) Barbara Sievert - (BSievert@juno ... state.ny.us) Jim Wasson - (james.wasson@redstone ...
www.fredonia.edu/alumni/1970.htm [cached](#)
8. [Stillwater Area High School Class of 1997 Directory](#) 
... Neils, Justin, justin.neils@unisys.com, AIM: Waileir0 ... Pruden, James,

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christinesievert@yahoo.com, 715-247 ...
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9. **Representative Offices** 
... **Tele:** fax(02): 238083; **Head:** Mr.CHARLES E.SIEBERT; **Activity:** **ENGINEERING** ... **Tele:** fax(02): **Head:** Mr.PATRICK JAMES LOOPAN; **Activity:** **CONSULTING** ... **Name:** UNISYS CORP. ... hannover.park.org/Thailand/MoreAboutAsia/ninfo/repoffs/usa.html [cached](#)
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Page 1. The dawn of a new century is almost here. Are you prepared for what the future will bring? Meeting the challenges of the ... www.socap.org/other/pdf/7f-899NL.pdf [view as html](#)
11. **Joanna S Fowler (MICROSOFT POWERPOINT)** 
... prize of \$5000 is supplied by the UNISYS Corporation ... In April of 1953, James Watson, Francis Crick and Maurice ... or gray) to a dose equivalent in rem (or sievert) ... www.womenandniletech.org/presentations/May2003Mothersofnvention.ppt [view as html](#)
12. **THE NATIONAL ELECTRONIC COMMERCE COORDINATING COUNCIL CONFERENCE (RTF)** 
... 517-323-0300. 517-335-0046. mulianeyk@state.mi.us. James S. Hurst. Accounting & Finance Director. Dept. ... 775-634-5800. 775-684-5846. James R. Wells. Chief Accountant. ... www.naspo.org/ECCC/necce99/attendance.rtf [view as html](#)
13. **Teleservices Agency Whos Who Roundup** 
... L&S Teleservices John Sievert P:800-894-7832; F ... Multilingual, Outbound Trade Miler Group James Quinn P ... Unisys Worldwide Telesales Services Alison Dickson P:800 ... www.tmcnet.com/articles/ccsmag/0699/0699whoswho1.htm [cached](#)
14. **<html> <head> </head> <body> <pre><html> <head> </>** 
... Jagiello Jalisco Jamaica Jamal James Jameson Jamshed ... Siegler Siemens Siemens Sierra Sievert Sig Sigid ... Obersicht Udairi Ultraphot Unal Unisys United Univac ... www.cs.nps.navy.mil/people/faculty/rowe/coursematerials/validwords.txt [cached](#)
15. **WEB Torch WS 03 (PDF)** 
... 16-22. Singer- songwriter James Hersh brought his unique musical outreach program to the campus and city of Crookston on Wed., Feb. ... James Robert Dieter ... www.crk.umn.edu/people/alumni/torch/Torch-W-S-2003.pdf [view as html](#)
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2. [Using Interface Inheritance to Address Problems in System ...](#) Using Interface Inheritance to Address Problems in System Software Evolution (1994) (Make Corrections) (9 citations) Graham Hamilton Sanjay Radia Sun ... cteaser.nj.nec.com/11543.html [cached](#) | [more results from this site](#)
3. [\[DUG\]: Interface Inheritance](#) ... [DUG]: Interface Inheritance. From: Todd Martin; ... Hi Does anyone know if there's a way to test for interface inheritance? For example IFirstDescendant ... www.mail-archive.com/delphi@delphi.org.nz/msg18352.html [cached](#) | [more results from this site](#)
4. [www-ws-desc@w3.org from April 2003: "recursive" interface ...](#) "recursive" interface inheritance. From: Liu ... interface inheritance"; Maybe reply: Savas Parastadlis: "RE: "recursive" interface inheritance"; ... lists.w3.org/Archives/Public/www-ws-desc/2003Apr/0155.html [cached](#) | [more results from this site](#)
5. [Interface inheritance](#) ... Interface inheritance. The CORBA standard ... The question arises, how things are handled when interface inheritance is used. MICO offers two ... emily.soils.wisc.edu/mico_docs/doc/node50.html [cached](#) | [more results from this site](#)
6. [Using Interface Inheritance to Address Problems in System ...](#) Using Interface Inheritance to Address Problems in System Software Evolution. ... Using Interface Inheritance to Address Problems in System Software Evolution. ... research.sun.com/research/techrep/1993/abstract-21.html [cached](#) | [more results from this site](#)
7. [Bill de hÓra: interface inheritance](#) ... December 18, 2002. interface inheritance. ... Interface inheritance is actually useful in terms of being able to say what you want to say. Taking Mark's examples of ... www.dehora.net/journal/archives/000116.html [cached](#) | [more results from this site](#)
8. [Interface inheritance](#) ... next up previous Next: Modules Up: C++ mapping Previous: Unions Interface inheritance. ... Figure 5.2: C++ class hierarchy for interface inheritance. ... vision.eng.shu.ac.uk/corba/mico/doc/docnode63.html [cached](#)
9. [IUnknown and Interface Inheritance](#) ... Because no implementations are associated with interfaces, interface inheritance does not mean code inheritance. ... IUnknown and Interface Inheritance. ...

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20. [Interface inheritance operator](#) ... Interface inheritance operator. ... The union of implementation inheritance and interface inheritance is the normal UML inheritance. ... www.isis.vanderbilt.edu/projects/GME2000/Doc/UsersManual/Interfaceinheritanceoperator.htm [cached](#) | [more results from this site](#)

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10. [Grant Killian](#) ... Me: Implementation Inheritance, or Interface Inheritance, that is the Question. ... This is also known as "interface inheritance." Take the following code: ... www.dotnetjunksies.com/WebLog/grant.killian/posts/1276.aspx [cached](#)
11. [Interface Inheritance](#) ... Interface Inheritance. You can choose not to derive CheckingAccountImpl() from AccountImpl(). ... Interface inheritance facilitates encapsulation. ... www.iona.com/support/docs/e2a/asp5.0/mainframe/pguide_c_cpp/html/ServerBasics18.html [cached](#) | [more results from this site](#)
12. [Interface Inheritance](#) ... Interface Inheritance #3: Versioning. ... www.woguru.com/playground/cs_tutorial/oo/interface_inheritance/versioning.htm [cached](#) | [more results from this site](#)
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14. [\[fpc-devel\]interface inheritance \(dom2\) bug???](#) [fpc-devel]interface inheritance (dom2) bug??? Peter Vreman ... 29 GMT: Previous message: [fpc-devel]interface inheritance (dom2) bug??? ... www.ni.freepascal.org/lists/fpc-devel/2002-August/002422.html [cached](#) | [more results from this site](#)
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17. [A 4.6 Mapping for interface inheritance](#) A 4.6 Mapping for interface inheritance. A 4.6 Mapping for interface inheritance. A 4.6.1 - Background A 4.6.2 - Specification A 4.6.3 - Rationale A 4.6.4 - Examples. ... www.functionobjects.com/products/doc/corba/corb_143.htm [cached](#) | [more results from this site](#)
18. [Interface Inheritance](#) [Main]. Interface Inheritance. Interface inheritance is the process of defining a new interface with all the methods found in one or more old interfaces. ... phoenix.iunet.edu/~mdevi/corba/InterfaceInherent.htm [cached](#)
19. [Neohapsis Archives - Microsoft DCOM Discuss - Re: Interface ...](#) LOCATION: Neohapsis / Archives / Microsoft DCOM Discuss / Message Index / Re: Interface inheritance and IErrorInfo problem. From: Sievert ... archives.neohapsis.com/archives/microsoft/various/dcom/2002-q4/0003.html [cached](#)








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... Template calls can also declare the use of an **interface**, in which ... Inheritance between interfaces is forbidden by XSLT (I felt this would make the language ... lists.w3.org/Archives/Public/xsl-editors/2002OctDec/0000.html [cached](#)
2. [Programming with Interfaces in Java](#) 
... If a "template" puts **no** restrictions on an object ... variables and parameters of an interface type ... two mechanisms of C++ (templates and multiple inheritance) ... csis.pace.edu/~bergin/papers/Interface.html [cached](#) | [more results from this site](#)
3. [4.3 Generic Programming Using Templates](#) 
... Dagger Up: 4 inheritance and Templates Previous: 4.2 Inheritance for Messages ... The CHARM++ interface file should contain the **template** definitions as charm.cs.uiuc.edu/manuals/html/charm++/node33.html [cached](#) | [more results from this site](#)
4. [5. Templates](#) 
... Constructing the interface between the templated C++ class ... the approach used in the inheritance example ... class pointers also have a **template** parameter that must ... www.esmf.ucar.edu/esmf_docs/impl_rep/node6.html [cached](#)
5. [Citations: Subtypes vs where clauses; Constraining parameter...](#) 
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6. [A Chat on Abstract Classes and Interfaces in Java \(MICROSOFT WORD\)](#) 
... If a "template" puts **no** restrictions on an object ... have variables and parameters of an interface type ... two mechanisms of C++ (templates and multiple inheritance) ... www.tcnj.edu/~mmartin/JavaCPP.doc view as html
7. [IUE Users Manual - 1.1 Goals](#) 
... had to provide a basic interface to support ... handle a wide range of **template** parameter types ... conversion problems arising from multiple inheritance and carefully ... www.aai.com/AI/IUE/doc/UM/UM-1.1.html [cached](#)
8. [Interfaces](#) 
... of parameters to a set of parameter names would ... Instead of allowing templates and template calls to ... reuse without adding complexity to interface declarations. ...

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Parameterized class ...
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- In-depth: The Parser** 
... This is essentially an **interface contract** ... is known as the "Curiously Recurring **Template Pattern**" in ... This inheritance strategy gives us the power of polymorphism ...
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- Document Title** 
... One benefit of this inheritance based approach is that ... handled - it returns the first interface that matches ... your object casted to the first **template parameter**. ...
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- Exploring Template Template Parameters** 
... Due to the public inheritance, the user can work with the container's typical interface to change ... only extension is that **template template parameters** inside ...
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9. **HOWTO: Reuse interface implementation in source in ATL projects** -
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... not derive from `IBaseImpl<>`, but instead it is passed in as a **template parameter**.
... for your design, but you'd have to **break interface inheritance hierarchy**, it ...
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10. **Policy-Based Class Design in C++ at InformIT.com** [🔗](#)
... suggests that a combination of templates and multiple inheritance could **engender** ... C++ with MS VC++ Compiler with **template template parameter** doesn't work. tjkwon. ...
www.informit.com/sapi/product_id=788A3DCB14-9FBE-498B-89B1-2CDB8C13F7058%7D/element_id=%7B7FE08113E-F288-455F-9DBE-92BFC77B0E44%7D/s1-%7B3FA3D9-20A6-4782-9A9E-05825F86658%7D/content/articde.asp [cached](#) | [more results from this site](#)
11. **Template Matching Tutorial (MICROSOFT WORD)** [🔗](#)
... we do NOT get a list of interfaces due to type `□ inheritance□`. ... **Public Interface A ...** What will the following do: Simple simple = new Simple(); **Template type = new** ...
sky.fi1.qut.edu.au/~millner/OO/TUTES2003/tut6.doc [view as html](#) | [more results from this site](#)
12. **Boost Mailing List Archive -- [boost] RFC: Inheritance ...** [🔗](#)
... C. Your comment here 2. Chained inheritance: every policy ... and is inherited from **one template parameter**, which in ... supposed to define a **public interface** and that ...
lists.boost.org/MailArchives/boost/msg28990.php [cached](#) | [more results from this site](#)
13. **Application Development Guide --Core Components** [🔗](#)
... Context Inheritance; The Initial Context; Private ... Type Definition; Filtering; User Interface Considerations; Writing ... Enabling EMS; Compiling; Event Consumer **Template**. ...
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14. **ODETTE** [🔗](#)
... parameterisation) and of class specialisation (**inheritance**). ... in the container (**template parameter Type**) needs to ... The **interface elements enhance the interface** ...
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15. **Objects by Design: Translating XML to HTML** [🔗](#)
... as such, may also have another interface as a ... requirement when modeling for languages which support multiple inheritance. ... The **template** may be found in the full ...
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16. **ModelMaker Home Page** [🔗](#)
... and drop to change **class/ interface inheritance** add **interface** ... be registered on the Code Template palette which ... selected members to another class or **interface**; ...
www.modelmaker.demon.nl/ce_features.htm [cached](#)
17. **Final Exam Composition (1) Composition (2) (PDF)** [🔗](#)
... Spring 2000) 20 **Inheritance** • **Inheritance**: public, protected ... defines an

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